17957



# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 5 230 SOUTH DEARBORN ST. CHICAGO, ILLINOIS 60604

### EXPRESS MAIL

March 27, 1991

5HS-11
REPLY TO ATTENTION OF:

Joe Adams, P.E. Warzyn Engineering Inc. . 2100 Corporate Drive Addison, Illinois 60101

Re: American Chemical Services NPL Site - FS Report

Dear Mr. Adams:

The purpose of this letter is to memorialize our meeting of March 21, 1991. During the meeting, we discussed issues from the previous teleconferences, the comments presented to you in my last teleconference follow-up letter, some of the larger issues which EPA believes necessary for a complete FS (i.e., the addition of the Griffith Municipal Landfill), and a revised schedule for submittal of the draft FS to U.S. EPA.

### **General Discussion**

Generally, we were able to agree on most of the issues included above. I have outlined some of the larger items which were discussed:

You mentioned that you were planning to meet with John Murphy and others from ACS to discuss the impact that various remedial alternatives would have on ACS' operation, and to obtain input from ACS on the implementability of each alternative as it affects ACS. We would like to encourage your continued coordination with ACS, to ensure a smooth FS and remedy selection.

We discussed the issue of groundwater treatment both inside and outside of any proposed slurry wall around the site. We agreed that groundwater remedies must include all of the affected groundwater that poses a risk to human health and the environment, and that the proposed alternatives will include discussions on the treatment of contaminated groundwater wherever it exists at the site.

We discussed a conceptual approach to the cleanup of groundwater at the site which we thought would be consistent for the majority of the alternatives. Overall, the main task in the beginning stages of most remedial action alternatives would include an effort to control groundwater gradient, direction and elevation until source areas (i.e., buried wastes and soils) could be removed or treated

Mr. Joe Adams, P.E. American Chemical Services NPL Site FS Report Meeting Follow-up March 27, 1991 Page 2 of 5 Pages

to the remedial action targets. Any existing groundwater pump and treat system would at that time, be primarily acting as a gradient control and/or dewatering mechanism which would include treatment of the contaminated groundwater. Following the primary phase of the remedial action (i.e., treatment or removal of the buried wastes and soils), the then present groundwater treatment system would either be optimized or altered to facilitate the most rapid cleanup of the remaining portions of the contaminated aquifer. Generally, once the source areas are treated, efforts will then focus toward remediating the aquifer.

We also discussed the lower aquifer issue. You said that treatment of the lower aquifer groundwater would be included in each of the alternatives with the exception of the No Action alternative. However, depending upon the results of computer modeling presently being conducted on the lower aquifer, the FS report may include either a detailed cost estimate of adding the lower aquifer groundwater to the main groundwater treatment system, or it would qualitatively estimate the cost associated with remediating the lower aquifer.

## **Municipal Landfill**

presentation concerning the Griffith Landfill concentrated upon the results of leachate data collected during the RI. You assert that the leachate is typical of municipal landfill leachate based upon the concentrations of hazardous substances found in average municipal landfill leachate. Based upon a cursory review of the data, it appears that you may be correct in your However, a risk assessment on the municipal landfill leachate has not yet been conducted. Our position at the meeting was that the landfill includes a portion of the NPL site, and that a risk assessment on the landfill leachate is required. Following a baseline risk assessment on the landfill, and depending upon its results, an FS on the landfill may then have to be completed. The FS should include a group of alternatives to be included for the municipal landfill. As we discussed at the meeting, the list would include an analysis of the effectiveness of various alternatives on reducing the risk, if any, that is posed by the landfill leachate both in the current and future land use scenarios. We generally discussed four to five different alternatives which may be appropriate for the landfill. They may include: 1) No Action; 2) Monitoring and State Agency control; 3) Monitoring and Capping under Subtitle D 4) Monitoring, Subtitle D capping, and leachate collection and treatment; and 5) Subtitle C Capping, leachate collection and treatment, and monitoring. These are just some of the examples of alternatives that we discussed at the meeting and are not intended to be the alternatives you would have to present. Generally, it is our position that the municipal landfill would

Mr. Joe Adams, P.E. American Chemical Services NPL Site FS Report Meeting Follow-up March 27, 1991 Page 3 of 5 Pages

have to be included in the evaluation of the site, and that based upon the risks posed by the landfill and the existing controls currently in-place to control those risks (i.e., regulation by the State) EPA would select the best alternative to ensure that the risks posed by the site, if any, would be minimized.

# **Updated Alternatives**

You presented the following updates to the alternatives presented in Chapter Four (FS Task 3):

Alternative 1: No Action

Alternative 2: Containment with slurry-wall; on-site1

gradient control; off-site<sup>2</sup> groundwater pumping and treatment; conduct treatability studies to select a superior technology to

treat the on-site buried waste and soil.

Alternative 3A: Dewatering of on-site areas; excavation and

on-site incineration of buried waste<sup>3</sup> approximately 35,000 yd<sup>3</sup>. Groundwater pumping and treatment of off-site areas with optimization of the groundwater pumping and treatment systems following successful

completion of buried waste incineration.

Alternative 3B: Same as Alternative 3A except low-temperature

thermal treatment would be used in lieu of

incineration.

Alternative 4: In-situ stream stripping of on-site buried

waste and soil; treatment of off-site

groundwater by pumping and treatment.

Alternative 5A: Dewatering of on-site areas; excavation and

on-site incineration of buried wastes; in-situ vapor extraction of remaining soils; groundwater pumping and treatment of off-site

The term on-site generally refers to the following source areas: the fenced area within the ACS operating facility, Kapica/Pazmey, and the Off-site Containment area.

The term off-site refers to areas of the site not included in the definition of on-site with exception to the Griffith Landfill.

Buried waste being any material which contains concentrations of hazardous substances exceeding two (2) percent mass per volume.

Mr. Joe Adams, P.E. American Chemical Services NPL Site FS Report Meeting Follow-up March 27, 1991 Page 4 of 5 Pages

groundwater; optimization of the groundwater treatment systems after successful treatment of buried waste and soil.

Alternative 5B:

Same as Alternative 5A except low-temperature thermal treatment would be used in lieu of incineration.

Alternative 5C:

Excavation and off-site disposal of drummed wastes contained in the "On-site Containment Area", and near surface PCB wastes to a TSCA/ RCRA treatment or disposal facility; in-situ vapor extraction of remaining noncontainerized buried soil; wastes and dewatering and groundwater pumping and treatment similar to Alternative 5A.

Alternative 6A:

Dewatering of on-site areas; excavation and on-site incineration of buried waste and soil<sup>4</sup>; Long term pumping and treatment of off-site groundwater; optimization of the groundwater treatment systems following successful treatment of on-site buried wastes and soils.

Alternative 6B:

Same as Alternative 6A except low-temperature thermal treatment would be used in lieu of incineration.

Alternative 7A:

Dewatering on-site of areas; on-site landfarming of buried wastes and soil; groundwater pumping and treatment of off-site groundwater; optimization of the groundwater following treatment systems successful treatment of the on-site buried wastes and soil.

Alternative 7B:

Same as Alternative 7A except that an on-site bio-slurry treatment system would be used in lieu of landfarming.

These are my understanding of the alternatives which you outlined at the meeting. My inclusion of your definitions (e.g., the definition of wastes) should not be interpreted as my acceptance of your definition.

The soil requiring treatment is defined as earth materials containing greater than 10 ppm of organic hazardous substances.

Mr. Joe Adams, P.E.
American Chemical Services NPL Site
FS Report Meeting Follow-up
March 27, 1991
Page 5 of 5 Pages

#### **Revised Schedule**

Based upon the discussions that we had, it is apparent that the content of the FS report will change significantly after our comments from past teleconferences are incorporated with those expressed during the meeting. In light of this, we concur with your request for additional time to complete the draft FS Report. At the meeting, it was agreed that you will have until COB April 19, 1991 to submit the report to U.S. EPA. However, since April 19, falls on a friday, it is unlikely that I will transmit copies of the document to the list of reviewers on that day. Consequently, I am extending the due date, in a show of good will, until 12:00 PM, April 22, 1991. This will give you an extra weekend to complete the document. No extensions to this date will be accepted.

In closing, I look forward to receiving the full FS report. If you have any questions, please do not hesitate to call me at (312) 886-5116.

Sincerely,

Robert E. Swale

latt & M

Remedial Project Manager

cc: Steve Siegel, ORC